

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

DOBRUSIN & THENNISCH PC
Attn. Dobrusin, Eric M.
401 South Old Woodward Avenue
Suite 311
Birmingham, Michigan 48009
UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing
(day/month/year)

04/08/2004

Applicant's or agent's file reference

1012. 188WO2

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.

PCT/US2004/008552

International filing date
(day/month/year)

19/03/2004

Applicant

SYMYX TECHNOLOGIES, INC.

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Patrick Wach

Received

AUG 09 2004

Dobrusin & Thennisch, P.C.
(See notes on accompanying sheet)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

- If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 1012. 188WO2	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/008552	International filing date (day/month/year) 19/03/2004	(Earliest) Priority Date (day/month/year) 21/03/2003
Applicant SYMYX TECHNOLOGIES, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 3a

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/008552

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N G01G B65B B81B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 644 803 A (WARD ROGER W) 24 February 1987 (1987-02-24) column 4, lines 20-66; figure 1 -----	1-40
Y	US 6 155 098 A (DEAN ANTHONY JOHN ET AL) 5 December 2000 (2000-12-05) column 3, lines 17-35 column 4, lines 46-56 -----	1-40
Y	US 2003/000291 A1 (KOLOSOV OLEG ET AL) 2 January 2003 (2003-01-02) paragraph '0078! -----	2-7
A	US 5 477 726 A (STABINGER HANS ET AL) 26 December 1995 (1995-12-26) column 2, lines 46-61; figure 1 ----- -/--	1,8-40



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

9 July 2004

Date of mailing of the international search report

04/08/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Cantalapiedra, I

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/008552

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 182 499 B1 (MATSIEV LEONID ET AL) 6 February 2001 (2001-02-06) column 11, line 56 - column 12, line 14; figure 5 -----	1,8-40
A	US 2002/074897 A1 (MA QING ET AL) 20 June 2002 (2002-06-20) page 2, paragraph 34 - page 3, paragraph 40; figures 9-16 -----	2-7
A	US 2002/178805 A1 (WALKOW ARNOLD ET AL) 5 December 2002 (2002-12-05) paragraph '0011! -----	2-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/008552

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4644803	A	24-02-1987	US 4574639 A	11-03-1986
			AT 37233 T	15-09-1988
			CA 1232775 A1	16-02-1988
			DE 3474064 D1	20-10-1988
			EP 0129753 A1	02-01-1985
			JP 60010148 A	19-01-1985
			US 4526480 A	02-07-1985
			US 4644796 A	24-02-1987
US 6155098	A	05-12-2000	US 6073479 A	13-06-2000
			EP 1001259 A2	17-05-2000
			JP 2000283938 A	13-10-2000
US 2003000291	A1	02-01-2003	WO 02099414 A1	12-12-2002
US 5477726	A	26-12-1995	AT 394784 B	25-06-1992
			AT 128768 T	15-10-1995
			DE 59106620 D1	09-11-1995
			EP 0487498 A1	27-05-1992
			AT 237790 A	15-11-1991
US 6182499	B1	06-02-2001	US 6030917 A	29-02-2000
			AT 239227 T	15-05-2003
			AU 9599898 A	27-04-1999
			DE 69814035 D1	05-06-2003
			DE 69814035 T2	23-10-2003
			EP 1361428 A2	12-11-2003
			EP 1361429 A2	12-11-2003
			EP 0943091 A1	22-09-1999
			ES 2199467 T3	16-02-2004
			WO 9918431 A1	15-04-1999
			US 6393895 B1	28-05-2002
			US 2002178787 A1	05-12-2002
			US 2003041653 A1	06-03-2003
			US 2004074302 A1	22-04-2004
			US 2004074303 A1	22-04-2004
			US 6401519 B1	11-06-2002
			US 2001010174 A1	02-08-2001
			AT 222401 T	15-08-2002
			AU 4673497 A	05-05-1998
			AU 4749397 A	05-05-1998
			AU 4812097 A	05-05-1998
			AU 4902497 A	05-05-1998
			AU 7801698 A	30-12-1998
			AU 8499798 A	16-02-1999
			CA 2267897 A1	16-04-1998
			CA 2267908 A1	16-04-1998
			CA 2297657 A1	04-02-1999
			DE 69714789 D1	19-09-2002
			DE 69714789 T2	05-12-2002
			DK 1019947 T3	02-12-2002
			EP 1280185 A1	29-01-2003
			EP 1019947 A2	19-07-2000
			EP 0934515 A1	11-08-1999
			EP 1021711 A2	26-07-2000
			EP 0920436 A1	09-06-1999
			EP 0950114 A1	20-10-1999
			EP 1000074 A1	17-05-2000

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/008552

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6182499	B1	ES 2182040 T3	01-03-2003
		WO 9815969 A2	16-04-1998
		WO 9815813 A1	16-04-1998
		WO 9815501 A2	16-04-1998
		WO 9815805 A1	16-04-1998
		WO 9856796 A1	17-12-1998
		WO 9905318 A1	04-02-1999
		WO 9905154 A1	04-02-1999
		US 6242623 B1	05-06-2001
		US 2003007152 A1	09-01-2003
		US 2002197731 A1	26-12-2002
		US 2002098471 A1	25-07-2002
		US 6419881 B1	16-07-2002
US 2002074897	A1	20-06-2002	US 2003168929 A1
			11-09-2003
US 2002178805	A1	05-12-2002	CA 2447317 A1
			21-11-2002
			EP 1397661 A2
			17-03-2004
			GB 2392980 A
			17-03-2004
			WO 02093126 A2
			21-11-2002

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/008552

International filing date (day/month/year)
19.03.2004

Priority date (day/month/year)
21.03.2003

International Patent Classification (IPC) or both national classification and IPC
G01N9/00

Applicant
SYMYX TECHNOLOGIES, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Cantalapiedra, I

Telephone No. +31 70 340-4260



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/008552

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/008552

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-40
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-40
Industrial applicability (IA)	Yes: Claims	1-40
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/008552

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial
applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: US-A-4 644 803 (WARD ROGER W) 24 February 1987 (1987-02-24)
- D2: US-A-6 155 098 (DEAN ANTHONY JOHN ET AL) 5 December 2000 (2000-12-05)
- D3: US 2003/000291 A1 (KOLOSOV OLEG ET AL) 2 January 2003 (2003-01-02)

1) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-40 does not involve an inventive step in the sense of Article 33(3) PCT:

The document **D1** is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A method of packaging a sensor comprising a flexural resonator, comprising: affixing a flexural resonator (D1, feature 24) having an exposed surface to a platform (D1, feature 20) wherein a spaced relationship is created between the exposed sensing surface and the platform so that the exposed sensing surface of the flexural resonator can displace a fluid in contact therewith (D1, fig 1).

The subject-matter of claim 1 therefore differs from this known D1 in that: affixing an ASIC to the platform for providing stimulus to the flexural resonator and for receiving a response signal from the flexural resonator; affixing a secondary component positioned independently from the ASIC on the platform (for example: temperature sensor) and optionally providing electrical communication between the ASIC and the secondary component.

The problem to be solved by the present invention may therefore be regarded as to have a circuit integrate into the platform in order to use less space and be more efficient.

The solution proposed in claim 1 of the present application has been proposed for

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/008552

example in D2, col 3, line 17-35 wherein a circuitry (such as an ASIC -col 4, line 46-56) is coupled to a quartz crystal resonator and a temperature sensor and is affixed to a platform (in D2, the plate temperature controlled 110). It will be obvious to the skilled person, namely when the same result is to be achieved, to apply these features to the features of D1 and therefore the subject-matter of claim 1 cannot be considered as involving an inventive step (Article 33(3) PCT).

1.2) The same reasoning applies, *mutatis mutandis*, to the subject-matter of the corresponding apparatus claim 20 which therefore is also considered not inventive.

2) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 2 does not involve an inventive step in the sense of Article 33(3) PCT.

The additional features of claim 2 is considered as: that there is added a protective layer covering the platform and the flexural resonator while maintaining the exposed sensing surface such that the exposed sensing surface can displace the fluid in contact therewith.

The problem to be solved is considered as to protect the components of the system against corrosive medium.

The skilled in the art would after integrate a circuitry nearby a resonator use for example the taught of D3, which discloses the use of protective layers (D3, paragraph 78) to protect the resonators against corrosion (or the circuitry) and solve the problem posed. Therefore the subject-matter of claim 2 is not considered as involving and inventive step under the requirements of Article 33(3) PCT.

it is pointed out that the use of a combination of three documents D1, D2 and D3 on the argumentation against inventive step for claim 2 is justified since the feature of the protective layer is completely independent from the use of the ASIC circuitry, and therefore the use of both features in the same claim 2 is just a juxtaposition of features and not a combination of features (see Guidelines C IV.9.5).

2.1) Dependent claims 3-19 are considered as being merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill in order to solve the problem posed, therefore the subject-matter of claims 3-19 is not considered as being inventive under the requirements of Article 33(3) PCT.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/008552

3) The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding apparatus claims 21-40 which therefore is also considered not inventive.